



INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

We make Indiana a cleaner, healthier place to live.

Frank O'Bannon
Governor

Lori F. Kaplan
Commissioner

100 North Senate Avenue
P. O. Box 6015
Indianapolis, Indiana 46206-6015
(317) 232-8603
(800) 451-6027
www.IN.gov/idem

Mr. Jerry L. Godwin
NIPSCO Michigan City Generating Station
801 East 86th Avenue
Merrillville, IN 46410

Re: Significant Source Modification No:
091-16184-00021

Dear Mr. Godwin:

NIPSCO Michigan City Generating Station applied for a Part 70 Operating Permit on September 19, 1996 for a stationary power plant. An application to modify the source was received on October 1, 2002. Pursuant to 326 IAC 2-7-10.5 the following emission units are approved for construction at the source:

One (1) auxiliary boiler, identified as AUX1.

The Significant Source Modification approval will be incorporated into the pending Part 70 permit application pursuant to 326 IAC 2-7-10.5(l)(3). If there are no changes to the proposed construction of the emission units, the source may begin operating on the date that IDEM receives an affidavit of construction pursuant to 326 IAC 2-7-10.5(h). If there are any changes to the proposed construction the source can not operate until an Operation Permit Validation Letter is issued.

This decision is subject to the Indiana Administrative Orders and Procedures Act - IC 4-21.5-3-5. If you have any questions on this matter call (800) 451-6027, press 0 and ask for Craig J. Friederich, c/o OAQ, 100 North Senate Avenue, P.O. Box 6015, Indianapolis, Indiana, 46206-6015, at 631-691-3395, ext. 19 or in Indiana at 1-800-451-6027 (ext 631-691-3395).

Sincerely,

Paul Dubenetzky, Chief
Permits Branch
Office of Air Quality

Attachments
CJF/MES

cc: File - LaPorte County
U.S. EPA, Region V
LaPorte County Health Department
Northwest Regional Office
Air Compliance Section Inspector - Rick Massoels
Compliance Branch - Karen Nowak
Administrative and Development - Lisa Lawrence
Technical Support and Modeling - Michele Boner





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PART 70 SIGNIFICANT SOURCE MODIFICATION OFFICE OF AIR QUALITY

**NIPSCO Michigan City Generating Station
100 North Wabash Street
Michigan City, Indiana 46360**

(herein known as the Permittee) is hereby authorized to construct and operate subject to the conditions contained herein, the emission units described in Section A (Source Summary) of this approval.

This approval is issued in accordance with 326 IAC 2 and 40 CFR Part 70 Appendix A and contains the conditions and provisions specified in 326 IAC 2-7 as required by 42 U.S.C. 7401, et. seq. (Clean Air Act as amended by the 1990 Clean Air Act Amendments), 40 CFR Part 70.6, IC 13-15 and IC 13-17.

Source Modification No.: 091-16184-00021	
Issued by: Paul Dubenetzky, Branch Chief Office of Air Quality	Issuance Date:

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Certification 15

Natural Gas-Fired Boiler Certification 16

SECTION A

SOURCE SUMMARY

This approval is based on information requested by the Indiana Department of Environmental Management (IDEM), Office of Air Quality (OAQ). The information describing the emission units contained in Conditions A.1 through A.3 is descriptive information and does not constitute enforceable conditions. However, the Permittee should be aware that a physical change or a change in the method of operation that may render this descriptive information obsolete or inaccurate may trigger requirements for the Permittee to obtain additional permits or seek modification of this approval pursuant to 326 IAC 2, or change other applicable requirements presented in the permit application.

A.1 General Information [326 IAC 2-7-4(c)] [326 IAC 2-7-5(15)]

The Permittee owns and operates a stationary electric utility generating station.

Responsible Official:	Vice President/General Manager, Electric Supply
Source Address:	100 North Wabash Street, Michigan City, IN 46360
Mailing Address:	801 East 86 th Avenue, Merrillville, IN 46410
General Source Phone Number:	219-647-5252
SIC Code:	4911
County Location:	LaPorte
Source Location Status:	Attainment for all criteria pollutants
Source Status:	Part 70 Permit Program Major Source, under PSD Rules; Major Source, Section 112 of the Clean Air Act 1 of 28 Source Categories

A.2 Emission Units and Pollution Control Equipment Summary [326 IAC 2-7-4(c)(3)] [326 IAC 2-7-5(15)]

This stationary source is approved to construct and operate the following emission units and pollution control devices:

One (1) natural gas fired auxiliary boiler, equipped with low NO_x burners, identified as AUX1, exhausting to Stack AUX1, rated at: 120 million British thermal units per hour.

A.3 Specifically Regulated Insignificant Activities [326 IAC 2-7-1(21)] [326 IAC 2-7-4(c)] [326 IAC 2-7-5(15)]

This stationary source modification does not include any insignificant activities as defined in 326 IAC 2-7-1(21).

A.4 Part 70 Permit Applicability [326 IAC 2-7-2]

This stationary source is required to have a Part 70 permit by 326 IAC 2-7-2 (Applicability) because:

- (a) It is a major source, as defined in 326 IAC 2-7-1(22);
- (b) It is a source in a source category designated by the United States Environmental Protection Agency (U.S. EPA) under 40 CFR 70.3 (Part 70 - Applicability).

SECTION B GENERAL CONSTRUCTION CONDITIONS

B.1 Definitions [326 IAC 2-7-1]

Terms in this permit shall have the definition assigned to such terms in the referenced regulation. In the absence of definitions in the referenced regulation, any applicable definitions found in the statutes or regulations (IC 13-11, 326 IAC 1-2 and 326 IAC 2-7) shall prevail.

B.2 Effective Date of the Permit [IC13-15-5-3]

Pursuant to IC 13-15-5-3, this approval becomes effective upon its issuance.

B.3 Revocation of Permits [326 IAC 2-1.1-9(5)] [326 IAC 2-7-10.5(i)]

Pursuant to 326 IAC 2-1.1-9(5)(Revocation of Permits), the Commissioner may revoke this approval if construction is not commenced within eighteen (18) months after receipt of this approval or if construction is suspended for a continuous period of one (1) year or more.

B.4 Significant Source Modification [326 IAC 2-7-10.5(h)]

This document shall also become the approval to operate pursuant to 326 IAC 2-7-10.5(h) when, prior to start of operation, the following requirements are met:

- (a) The attached affidavit of construction shall be submitted to the Office of Air Quality (OAQ), Permit Administration & Development Section, verifying that the emission units were constructed as proposed in the application. The emissions units covered in the Significant Source Modification approval may begin operating on the date the affidavit of construction is postmarked or hand delivered to IDEM if constructed as proposed.
- (b) If actual construction of the emissions units differs from the construction proposed in the application, the source may not begin operation until the source modification has been revised pursuant to 326 IAC 2-7-11 or 326 IAC 2-7-12 and an Operation Permit Validation Letter is issued.
- (c) If construction is completed in phases; i.e., the entire construction is not done continuously, a separate affidavit must be submitted for each phase of construction. Any permit conditions associated with operation start up dates such as stack testing for New Source Performance Standards (NSPS) shall be applicable to each individual phase.
- (d) The Permittee shall receive an Operation Permit Validation Letter from the Chief of the Permit Administration & Development Section and attach it to this document.
- (e) In the event that the Part 70 application is being processed at the same time as this application, the following additional procedures shall be followed for obtaining the right to operate:
 - (1) If the Part 70 draft permit has not gone on public notice, then the change/addition covered by the Significant Source Modification will be included in the Part 70 draft.
 - (2) If the Part 70 permit has gone thru final EPA proposal and would be issued ahead of the Significant Source Modification, the Significant Source Modification will go through a concurrent 45 day EPA review. Then the Significant Source Modification will be incorporated into the final Part 70 permit at the time of issuance.
 - (3) If the Part 70 permit has not gone through public notice, but has not gone through final EPA review and would be issued after the Significant Source Modification is issued, then the Modification would be added to the proposed Part 70 permit, and the Title V permit will be issued after EPA review.

B.5 NSPS Reporting Requirement

Pursuant to the New Source Performance Standards (NSPS), Part 60.40, Subpart Db, the source owner/operator is hereby advised of the requirement to report the following at the appropriate times:

- (a) Commencement of construction date (no later than 30 days after such date);
- (b) Actual start-up date (within 15 days after such date); and
- (c) Date of performance testing (at least 30 days prior to such date), when required by a condition elsewhere in this permit.

Reports are to be sent to:

Indiana Department of Environmental Management
Compliance Data Section, Office of Air Quality
100 North Senate Avenue, P. O. Box 6015
Indianapolis, IN 46206-6015

The application and enforcement of these standards have been delegated to the IDEM, OAQ. The requirements of 40 CFR Part 60 are also federally enforceable.

SECTION C GENERAL OPERATION CONDITIONS

C.1 Certification [326 IAC 2-7-4(f)] [326 IAC 2-7-6(1)] [326 IAC 2-7-5(3)(C)]

- (a) Where specifically designated by this permit or required by an applicable requirement, any application form, report, or compliance certification submitted shall contain certification by a responsible official of truth, accuracy, and completeness. This certification shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.
- (b) One (1) certification shall be included, using the attached Certification Form, with each submittal requiring certification.
- (c) A responsible official is defined at 326 IAC 2-7-1(34).

C.2 Permit Amendment or Modification [326 IAC 2-7-11] [326 IAC 2-7-12]

- (a) Permit amendments and modifications are governed by the requirements of 326 IAC 2-7-11 or 326 IAC 2-7-12 whenever the Permittee seeks to amend or modify this permit.
- (b) Any application requesting an amendment or modification of this permit shall be submitted to:

Indiana Department of Environmental Management
Permits Branch, Office of Air Quality
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

Any such application should be certified by the "responsible official" as defined by 326 IAC 2-7-1(34).
- (c) The Permittee may implement administrative amendment changes addressed in the request for an administrative amendment immediately upon submittal of the request. [326 IAC 2-7-11(c)(3)]

C.3 Opacity [326 IAC 5-1]

Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary alternative opacity limitations), opacity shall meet the following, unless otherwise stated in this approval:

- (a) Opacity shall not exceed an average of forty percent (40%) in any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.
- (b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

C.4 Fugitive Dust Emissions [326 IAC 6-4]

The Permittee shall not allow fugitive dust to escape beyond the property line or boundaries of the property, right-of-way, or easement on which the source is located, in a manner that would violate 326 IAC 6-4 (Fugitive Dust Emissions).

C.5 Operation of Equipment [326 IAC 2-7-6(6)]

Except as otherwise provided by statute or rule, or in this permit, all air pollution control equipment listed in this permit and used to comply with an applicable requirement shall be operated at all times

that the emission unit vented to the control equipment is in operation.

Testing Requirements [326 IAC 2-7-6(1)]

C.6 Performance Testing [326 IAC 3-6] [326 IAC 2-1.1-11]

- (a) Compliance testing on new emission units shall be conducted within 60 days after achieving maximum production rate, but no later than 180 days after initial start-up, if specified in Section D of this approval. All testing shall be performed according to the provisions of 326 IAC 3-6 (Source Sampling Procedures), except as provided elsewhere in this approval, utilizing any applicable procedures and analysis methods specified in 40 CFR 51, 40 CFR 60, 40 CFR 61, 40 CFR 63, 40 CFR 75, or other procedures approved by IDEM, OAQ.

A test protocol, except as provided elsewhere in this approval, shall be submitted to:

Indiana Department of Environmental Management
Compliance Data Section, Office of Air Quality
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

no later than thirty-five (35) days prior to the intended test date. The protocol submitted by the Permittee does not require certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

- (b) The Permittee shall notify IDEM, OAQ of the actual test date at least fourteen (14) days prior to the actual test date. The notification submitted by the Permittee does not require certification by the "responsible official" as defined by 326 IAC 2-7-1(34).
- (c) Pursuant to 326 IAC 3-6-4(b), all test reports must be received by IDEM, OAQ not later than forty-five (45) days after the completion of the testing. An extension may be granted by the IDEM, OAQ, if the source submits to IDEM, OAQ, a reasonable written explanation not later than five (5) days prior to the end of the initial forty-five (45) day period.

Compliance Requirements [326 IAC 2-1.1-11]

C.7 Compliance Requirements [326 IAC 2-1.1-11]

The commissioner may require stack testing, monitoring, or reporting at any time to assure compliance with all applicable requirements by issuing an order under 326 IAC 2-1.1-11. Any monitoring or testing shall be performed in accordance with 326 IAC 3 or other methods approved by the commissioner or the U. S. EPA.

Compliance Monitoring Requirements [326 IAC 2-7-5(1)] [326 IAC 2-7-6(1)]

C.8 Compliance Monitoring [326 IAC 2-7-5(3)] [326 IAC 2-7-6(1)]

If required by Section D, all monitoring and record keeping requirements shall be implemented when operation begins. The Permittee shall be responsible for installing any necessary equipment and initiating any required monitoring related to that equipment.

C.9 Maintenance of Continuous Emission Monitoring Equipment [326 IAC 2-7-5(3)(A)(iii)]

- (a) The Permittee shall install, calibrate, maintain, and operate all necessary continuous emission monitoring systems (CEMS) and related equipment. In addition, prompt corrective action shall be initiated whenever indicated.

- (b) In the event that a breakdown of a continuous emission monitoring system occurs, a record shall be made of the times and reasons of the breakdown and efforts made to correct the problem.
- (c) Whenever a continuous emission monitor other than an opacity monitor is malfunctioning or will be down for calibration, maintenance, or repairs, the following shall be used as an alternative to continuous data collection:
 - (1) If the CEM is required for monitoring NO_x emissions pursuant to 40 CFR 75 (Title IV Acid Rain program) or 326 IAC 10-4 (NO_x Budget Trading Program), the Permittee shall comply with the relevant requirements of 40 CFR 75 Subpart D - Missing Data Substitution Procedures.
 - (2) If the CEM is not used to monitor NO_x emissions pursuant to 40 CFR 75 or 326 IAC 10-4, then supplemental or intermittent monitoring of the parameter shall be implemented as specified in Section D of this permit until such time as the emission monitor system is back in operation.
- (d) Nothing in this permit shall excuse the Permittee from complying with the requirements to operate a continuous emission monitoring system pursuant to 40 CFR Part 60. 40, Subpart Db.

C.10 Monitoring Methods [326 IAC 3] [40 CFR 60] [40 CFR 63]

Any monitoring or testing required by Section D of this permit shall be performed according to the provisions of 326 IAC 3, 40 CFR 60, Appendix A, 40 CFR 60 Appendix B, 40 CFR 63, or other approved methods as specified in this permit.

Corrective Actions and Response Steps [326 IAC 2-7-5] [326 IAC 2-7-6]

C.11 Emergency Provisions [326 IAC 2-7-16]

- (a) An emergency, as defined in 326 IAC 2-7-1(12), is not an affirmative defense for an action brought for noncompliance with a federal or state health-based emission limitation.
- (b) An emergency, as defined in 326 IAC 2-7-1(12), constitutes an affirmative defense to an action brought for noncompliance with a technology-based emission limitation if the affirmative defense of an emergency is demonstrated through properly signed, contemporaneous operating logs or other relevant evidence that describe the following:
 - (1) An emergency occurred and the Permittee can, to the extent possible, identify the causes of the emergency;
 - (2) The permitted facility was at the time being properly operated;
 - (3) During the period of an emergency, the Permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards or other requirements in this permit;
 - (4) For each emergency lasting one (1) hour or more, the Permittee notified IDEM, OAQ, Northwest Regional Office within four (4) daytime business hours after the beginning of the emergency, or after the emergency was discovered or reasonably should have been discovered;

Telephone Number: 1-800-451-6027 (ask for Office of Air Quality, Compliance Section), or

Telephone Number: 317-233-5674 (ask for Compliance Section)
Facsimile Number: 317-233-5967
Northwest Regional Office:
Telephone Number: 219-881-6712
Facsimile Number: 219-881-6745

- (5) For each emergency lasting one (1) hour or more, the Permittee submitted the attached Emergency Occurrence Report Form or its equivalent, either by mail or facsimile to:

Indiana Department of Environmental Management
Compliance Branch, Office of Air Quality
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

within two (2) working days of the time when emission limitations were exceeded due to the emergency.

The notice fulfills the requirement of 326 IAC 2-7-5(3)(C)(ii) and must contain the following:

- (A) A description of the emergency;
- (B) Any steps taken to mitigate the emissions; and
- (C) Corrective actions taken.

The notification which shall be submitted by the Permittee does not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

- (6) The Permittee immediately took all reasonable steps to correct the emergency.
- (c) In any enforcement proceeding, the Permittee seeking to establish the occurrence of an emergency has the burden of proof.
 - (d) This emergency provision supersedes 326 IAC 1-6 (Malfunctions). This permit condition is in addition to any emergency or upset provision contained in any applicable requirement.
 - (e) IDEM, OAQ, may require that the Preventive Maintenance Plans required under 326 IAC 2-7-4-(c)(10) be revised in response to an emergency.
 - (f) Failure to notify IDEM, OAQ, by telephone or facsimile of an emergency lasting more than one (1) hour in accordance with (b)(4) and (5) of this condition shall constitute a violation of 326 IAC 2-7 and any other applicable rules.
 - (g) If the emergency situation causes a deviation from a technology-based limit, the Permittee may continue to operate the affected emitting facilities during the emergency provided the Permittee immediately takes all reasonable steps to correct the emergency and minimize emissions.

C.12 Actions Related to Noncompliance Demonstrated by a Stack Test [326 IAC 2-7-5] [326 IAC 2-7-6]

- (a) When the results of a stack test performed in conformance with Section C - Performance Testing, of this permit exceed the level specified in any condition of this permit, the Permittee shall take appropriate response actions. The Permittee shall submit a description of these

response actions to IDEM, OAQ, within thirty (30) days of receipt of the test results. The Permittee shall take appropriate action to minimize excess emissions from the affected facility while the response actions are being implemented.

- (b) A retest to demonstrate compliance shall be performed within one hundred twenty (120) days of receipt of the original test results. Should the Permittee demonstrate to IDEM, OAQ that retesting in one-hundred and twenty (120) days is not practicable, IDEM, OAQ may extend the retesting deadline.
- (c) IDEM, OAQ reserves the authority to take any actions allowed under law in response to noncompliant stack tests.

The documents submitted pursuant to this condition do require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

C.13 General Record Keeping Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-6]

- (a) Records of all required data, reports and support information shall be retained for a period of at least five (5) years from the date of monitoring sample, measurement, report, or application. These records shall be kept at the source location for a minimum of three (3) years. The records may be stored elsewhere for the remaining two (2) years as long as they are available upon request. If the Commissioner makes a request for records to the Permittee, the Permittee shall furnish the records to the Commissioner within a reasonable time.
- (b) Unless otherwise specified in this permit, all record keeping requirements not already legally required shall be implemented within ninety (90) days of permit issuance.

C.14 General Reporting Requirements [326 IAC 2-7-5(3)(C)]

- (a) The reports required by conditions in Section D of this permit shall be submitted to:

Indiana Department of Environmental Management
Compliance Data Section, Office of Air Quality
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015
- (b) Unless otherwise specified in this permit, any notice, report, or other submission required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ, on or before the date it is due.
- (c) Unless otherwise specified in this permit, all reports required in Section D of this permit shall be submitted within thirty (30) days of the end of the reporting period. All reports do require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).
- (d) The first report shall cover the period commencing on the date of issuance of this permit and ending on the last day of the reporting period. Reporting periods are based on calendar years.

Part 2 MACT Application Submittal Requirement

C.15 Application Requirements for Section 112(j) of the Clean Air Act [40 CFR 63.52(e)] [40 CFR 63.56(a)] [40 CFR 63.9(b)] [326 IAC 2-7-12]

- (a) The Permittee shall submit a Part 2 MACT Application in accordance with 40 CFR 63.52(e)(1). The Part 2 MACT Application shall meet the requirements of 40 CFR 63.53(b).
- (b) Notwithstanding paragraph (a), the Permittee is not required to submit a Part 2 MACT Application if the Permittee no longer meets the applicability criteria of 40 CFR 63.50 by the application deadline in 40 CFR 63.52(e)(1). For example, the Permittee would not have to submit a Part 2 MACT Application if, by the application deadline:
 - (1) The source is no longer a major source of hazardous air pollutants, as defined in 40 CFR 63.2;
 - (2) The source no longer includes one or more units in an affected source category for which the U.S. EPA failed to promulgate an emission standard by May 15, 2002; or
 - (3) The MACT standard or standards for the affected source categories included at the source are promulgated.
- (c) Notwithstanding paragraph (a), pursuant to 40 CFR 63.56(a), the Permittee shall comply with an applicable promulgated MACT standard in accordance with the schedule provided in the MACT standard if the MACT standard is promulgated prior to the Part 2 MACT Application deadline or prior to the issuance of permit with a case-by-case Section 112(j) MACT determination. The MACT requirements include the applicable General Provisions requirements of 40 CFR 63, Subpart A. Pursuant to 40 CFR 63.9(b), the Permittee shall submit an initial notification not later than 120 days after the effective date of the MACT, unless the MACT specifies otherwise. The initial notification shall be submitted to:

Indiana Department of Environmental Management
Compliance Data Section, Office of Air Quality
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

and

United States Environmental Protection Agency, Region V
Director, Air and Radiation Division
77 West Jackson Boulevard
Chicago, Illinois 60604-3590

SECTION D.1

FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]: One (1) auxiliary boiler

One (1) natural gas fired auxiliary boiler, equipped with low NO_x burners, identified as AUX1, exhausting to Stack AUX1, rated at: 120 million British thermal units per hour.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.1.1 General Provisions Relating to NSPS [326 IAC 12-1] [40 CFR 60, Subpart A]

The provisions of 40 CFR 60 Subpart A - General Provisions, which are incorporated as 326 IAC 12-1, apply to the facility described in this section except when otherwise specified in 40 CFR 60 Subpart Db.

D.1.2 New Source Performance Standard (NSPS) [326 IAC 12] [40 CFR 60, Subpart Db]

Pursuant to 326 IAC 12 and 40 CFR 60, Subpart Db (Standards of Performance for Industrial-Commercial-Institutional Steam Generating Units), emissions from the one (1) auxiliary boiler shall not exceed the following:

One-tenths (0.10) pound NO_x per million Btu (MMBtu) heat input for a low heat release rate. This limitation is based on the equation in [40 CFR 60.44b(l)].

D.1.3 Particulate (PM) [326 IAC 6-2-4]

Pursuant to 326 IAC 6-2-4 (Particulate Emissions Limitations for Facilities Constructed after September 21, 1983) the particulate emissions from the one (1) auxiliary boiler, rated at 120 million British thermal units per hour, shall be limited to 0.112 pound per million British thermal units heat input.

This limitation is based on the following equation:

$$Pt = 1.09/Q^{0.26}$$

where:

Pt = Pounds of particulate matter emitted per million British thermal units (lb/mmBtu) heat input

Q = Total source maximum operating capacity rating in million British thermal units per hour (mmBtu/hr) heat input. The maximum operating capacity rating is defined as the maximum capacity at which the facility is operated or the nameplate capacity, whichever is specified in the facility's permit application, except when some lower capacity is contained in the facility's operation permit; in which case, the capacity specified in the operation permit shall be used.

Compliance Determination Requirements

D.1.4 NSPS Compliance Provisions [326 IAC 12] [40 CFR 60, Subpart Db]

(a) The NO_x emission limitation in Condition D.1.2 apply at all times, including periods of startup, shutdown, and malfunction.

(b) Compliance with the NO_x emission limitation in Condition D.1.2 shall be determined by the methods and procedures specified in 40 CFR 60.46b(e).

D.1.5 Emissions Monitoring [40 CFR 60, Subpart Db]

Pursuant to 40 CFR 60.47b and 60.48b (for Subpart Db), either:

- (a) a continuous monitoring system shall be calibrated, maintained, and operated for measuring NO_x from Stack AUX1, which meets the performance specifications of 326 IAC 3-5-2, or
- (b) a predictive emissions monitoring plan can be submitted to the Administrator according to 40 CFR 60.48b(g)(2) within 360 days from initial startup and the monitoring plan shall be used for determining compliance with the NO_x limit from Stack AUX1 contained in Condition D.1.2.

Compliance Monitoring Requirements [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

There are no specific Compliance Monitoring Requirements applicable to this emission unit.

Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

D.1.6 Record Keeping Requirements

- (a) To document compliance with Condition D.1.2, the Permittee shall maintain records in accordance with 40 CFR 60.49b.
- (b) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

D.1.7 Reporting Requirements

- (a) To document compliance with Condition D.1.2, reports shall be submitted to the address listed in Section C - General Reporting Requirements, and shall contain the information required in 40 CFR 60.49b.
- (b) The natural gas boiler certification shall be submitted to the address listed in Section C - General Reporting Requirements, of this permit, using the reporting forms located at the end of this permit, or it's equivalent, within thirty (30) days after the end of the six (6) month period being reported. The natural gas-fired boiler certification does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY**

**PART 70 SOURCE MODIFICATION
CERTIFICATION**

Source Name: NIPSCO Michigan City Generating Station
Source Address: 100 North Wabash Street, Michigan City, IN 46360
Mailing Address: 801 East 86th Avenue, Merrillville, IN 46410
Source Modification No.: 091-16184-00021

This certification shall be included when submitting monitoring, testing reports/results or other documents as required by this approval.

Please check what document is being certified:

- 9 Test Result (specify) _____
- 9 Report (specify) _____
- 9 Notification (specify) _____
- 9 Affidavit (specify) _____
- 9 Other (specify) _____

I certify that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

Signature:

Printed Name:

Title/Position:

Date:

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE DATA SECTION**

**PART 70 OPERATING PERMIT
SEMI-ANNUAL NATURAL GAS-FIRED BOILER CERTIFICATION**

Source Name: NIPSCO Michigan City Generating Station
Source Address: 100 North Wabash Street, Michigan City, IN 46360
Mailing Address: 801 East 86th Avenue, Merrillville, IN 46410
Source Modification No. : 091-16184-00021

9 Natural Gas Only

9 Alternate Fuel burned

From: _____ To: _____

I certify that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

Signature:

Printed Name:

Title/Position:

Phone:

Date:

A certification by the responsible official as defined by 326 IAC 2-7-1(34) is required for this report.

Indiana Department of Environmental Management Office of Air Quality

Addendum to the Technical Support Document for a Part 70 Significant Source Modification

Source Name: NIPSCO Michigan City Generating Station
Source Location: 100 North Wabash Street, Michigan City, IN 46360
County: LaPorte
SIC Code: 4911
Source Modification: SSM 091-16184-00021
Permit Reviewer: Craig J. Friederich

On December 28, 2002, the Office of Air Quality (OAQ) had a notice published in the News Despatch, Michigan City, Indiana, stating that NIPSCO Michigan City Generating Station had applied for a Significant Source Modification for the installation of one (1) auxiliary boiler with low NO_x burners. The notice also stated that OAQ proposed to issue a Significant Source Modification for this operation and provided information on how the public could review the proposed Significant Source Modification and other documentation. Finally, the notice informed interested parties that there was a period of thirty (30) days to provide comments on whether or not this Significant Source Modification should be issued as proposed.

On January 24, 2002, Kelly R. Carmichael, Coordinator, Air Permits, NiSource, Inc., submitted comments on the proposed Significant Source Modification. The comments are as follows: The permit language, if changed, has deleted language as ~~strikeouts~~ and new language **bolded**.

Comment 1:

Section C.2:

A preventative maintenance plan is not required in Section D of the permit. Please strike Section C.2.

Response 1:

Most permits issued by the IDEM, OAQ contain a PMP in section D. In rare occasions where there is no PMP, the source may request that the condition be removed. In this case, a PMP is not required in Section D of the permit. Therefore, Condition C.2 has been deleted as follows and all subsequent conditions in Section C have been re-numbered.

~~C.2 — Preventive Maintenance Plan [326 IAC 2-7-5(1),(3) and (13)] [326 IAC 2-7-6(1) and (6)]
[326 IAC 1-6-3]~~

~~(a) — If required by specific condition(s) in Section D of this permit, the Permittee shall prepare and maintain Preventive Maintenance Plans (PMPs) when operation begins, including the following information on each facility:~~

- ~~(1) — Identification of the individual(s) responsible for inspecting, maintaining, and repairing emission control devices;~~
- ~~(2) — A description of the items or conditions that will be inspected and the inspection schedule for said items or conditions; and~~
- ~~(3) — Identification and quantification of the replacement parts that will be maintained in inventory for quick replacement.~~

~~If due to circumstances beyond the Permittee's control, the PMPs cannot be prepared and maintained within the above time frame, the Permittee may extend the date an additional ninety (90) days provided the Permittee notifies:~~

~~Indiana Department of Environmental Management
Compliance Branch, Office of Air Quality
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015~~

~~The PMP and the PMP extension notification do not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).~~

- ~~(b) The Permittee shall implement the PMPs as necessary to ensure that failure to implement a PMP does not cause or contribute to a violation of any limitation on emissions or potential to emit.~~
- ~~(c) A copy of the PMPs shall be submitted to IDEM, OAQ, upon request and within a reasonable time, and shall be subject to review and approval by IDEM, OAQ. IDEM, OAQ, may require the Permittee to revise its PMPs whenever lack of proper maintenance causes or contributes to any violation. The PMP does not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).~~
- ~~(d) Records of preventive maintenance shall be retained for a period of at least five (5) years. These records shall be kept at the source location for a minimum of three (3) years. The records may be stored elsewhere for the remaining two (2) years as long as they are available upon request. If the Commissioner makes a request for records to the Permittee, the Permittee shall furnish the records to the Commissioner within a reasonable time.~~

Comment 2:

Section C.6:

This modification does not include air pollution control equipment. Please strike Section C.6.

Response 2:

Condition C.6, (now Condition C.5) "Operation of Equipment" will not be removed, even though this source does not have any control equipment at this time. However, the condition is required to stay in the permit because a new facility could be added to the source at some later date. If the new facility has control equipment, the source will be aware of their responsibilities for the control equipment. Also, this decreases the number of changes to the permit upon modification and lessens the likelihood of confusion. Therefore, no change to the permit has been made as a result of this comment.

Comment 3:

Section C.7(c):

We believe the intent of the rule is to not have interim or draft emission test reports submitted that would potentially confuse IDEM regarding the true test results, but the final QA/QCed report submitted within the specified time period. Therefore, we recommend modifying the language to convey this intent as listed below:

. . . all final QA/QCed test reports must be received . . .

Response 3:

326 IAC 3-6-4(b) states that "all emission test reports must be received by the department not later than forty-five (45) days after the completion of the testing". Therefore the condition is clear enough as stated and as such the wording in Condition C.7(c) (now Condition C.6(c)) will not be revised. Therefore, there are no changes as a result of this comment.

Comment 4:

Section C.10(c):

Section C.10(c)(2) and Section D.1.4 conflict with one another with respect to the four hour downtime requirement. The only CEM requirement is the NSPS Subpart Db for the auxiliary boiler. This NSPS has very specific downtime monitoring procedures as referenced in D.1.4 of the draft permit, which do not coincide with a four hour requirement. Strike the four (4) hours or more from C.10(c)(2):

. . . NO_x Budget Trading Program, ~~and is down for a period of four (4) hours or more~~, then supplemental . . .

In addition, IDEM has changed the standard language for this condition, not requiring a backup CEM be brought online within four hours, but rather that:

. . . supplemental or intermittent monitoring of the parameter shall be implemented as specified in Section D of this permit until such time as the emission monitor system is back in operation.

The NSPS for this boiler has specific data availability requirements and supplemental monitoring requirements for CEM downtime. Please change C.10(c)(2) to reflect current IDEM standard language and strike the four hour requirement as it is in conflict with the NSPS requirements as discussed above.

- (2) If the CEM is not used to monitor NO_x emissions from a unit subject to requirements of the Title IV Acid Rain program or the NO_x Budget Trading Program, ~~and is down for a period of four (4) hours or more~~, then supplemental or intermittent monitoring of the parameter shall be implemented as specified in Section D of this permit until such time as the emission monitor system is back in operation.

Response 4:

Condition C.10(c) (now Condition C.9(c)) has been revised as follows:

C.409 Maintenance of Continuous Emission Monitoring Equipment [326 IAC 2-7-5(3)(A)(iii)]

- (c) Whenever a continuous emission monitor other than an opacity monitor is malfunctioning or will be down for calibration, maintenance, or repairs ~~for a period of four (4) hours or more, a calibrated backup CEMS shall be brought online within four (4) hours of shutdown of the primary CEMS, and shall be operated until such time as the primary CEMS is back in operation;~~ **the following shall be used as an alternative to continuous data collection:**

- (1) **If the CEM is required for monitoring NO_x emissions pursuant to 40 CFR 75**

(Title IV Acid Rain program) or 326 IAC 10-4 (NO_x Budget Trading Program), the Permittee shall comply with the relevant requirements of 40 CFR 75 Subpart D - Missing Data Substitution Procedures.

- (2) If the CEM is not used to monitor NO_x emissions pursuant to 40 CFR 75 or 326 IAC 10-4, then supplemental or intermittent monitoring of the parameter shall be implemented as specified in Section D of this permit until such time as the emission monitor system is back in operation.**

Comment 5:

Sections c.16(b) and C.16(c) should be modified to reflect the opportunity to have later compliance dates that could result from court orders, settlement agreements or other schedule changes:

- (b) Notwithstanding paragraph (a), the Permittee . . .
- (3) The MACT standard or standards for the affected source categories included at the source are promulgated or relief is provided by a court order, settlement agreement or other schedule change.
- (c) Notwithstanding paragraph (a), pursuant . . . Pursuant to 40 CFR 63.9(b), the Permittee shall submit an initial notification not later than 120 days after the effective date of the MACT, unless the MACT specified otherwise or relief is provided by a court order, settlement agreement or other schedule change.

Response 5:

IDEM, OAQ has determined that no change is necessary to the language. U.S. EPA must change the rules implementing Section 112(j) at 40 CFR 63.50 through 63.56 in order to change the due date of the Part 2 MACT Application or no longer require a Part 2 MACT Application. The permit requires that the applications be submitted in accordance with the rule. The Title V permit can only include applicable requirements. The U.S. EPA will have to change the applicable requirement in order to provide relief. IDEM, OAQ does not feel that is appropriate to include the suggested language to Condition C.21(b)(3) because it is not an accurate depiction of what must happen to change the due date of the Part 2 MACT Application.

Note that on December 9, 2002, the U.S. EPA proposed changes to the Section 112(j) rules to change the Part 2 deadlines. Therefore, when the rules are finalized and effective, the applicable requirement will be changed, and the new deadline will be provided in the rule.

In addition, IDEM, OAQ does not think it is relevant to include the suggested phrase in Condition C.16(c) (now Condition C.15(c)). The MACT standard will specify if the initial notification is due on a different timeline than the General Provisions requirements in 40 CFR 63 Subpart A. Since the point of this condition is that the MACT standard has not yet been promulgated, it is premature and irrelevant to include a phrase about a court order or settlement providing relief from the initial notification requirements.

Upon further review, the OAQ has decided to make the following changes to the Significant Source Modification: The permit language is changed to read as follows (deleted language appears as ~~strikeouts~~, new language is **bolded**):

Change 1:

The description in Section A.1 has been revised as follows to more accurately describe the operations at the source:

A.1 General Information [326 IAC 2-7-4(c)] [326 IAC 2-7-5(15)]

The Permittee owns and operates a stationary ~~source~~ **electric utility generating station**.

**Indiana Department of Environmental Management
Office of Air Quality**

**Technical Support Document (TSD) for a Part 70
Significant Source Modification**

Source Background and Description

Source Name:	NIPSCO Michigan City Generating Station
Source Location:	100 North Wabash Street, Michigan City, IN 46360
County:	LaPorte
SIC Code:	4911
Operation Permit No.:	T 091-6637-00021
Operation Permit Issuance Date:	Not Yet Issued
Significant Source Modification No.:	SSM 091-16184-00021
Permit Reviewer:	Craig J. Friederich

The Office of Air Quality (OAQ) has reviewed a modification application from NIPSCO Michigan City Generating Station relating to the construction and operation of the following emission units and pollution control devices:

One (1) natural gas fired auxiliary boiler, equipped with low NO_x burners, identified as AUX1, exhausting to Stack AUX1, rated at: 120 million British thermal units per hour.

History

On October 1, 2002, NIPSCO Michigan City Generating Station submitted an application to the OAQ requesting to add an additional natural gas fired auxiliary boiler to their existing plant.

Existing Approvals

The source applied for a Part 70 Operating Permit T 091-6637-00021 on September 19, 1996. The source has been operating under previous approvals including, but not limited to the following:

- (a) AR 091-5301-00021, issued on December 31, 1997,
- (b) Exemption 091-8715-00021, and
- (c) Exemption 091-9566-00021.

Enforcement Issue

There are no enforcement actions pending.

Recommendation

The staff recommends to the Commissioner that the Part 70 Significant Source Modification be approved. This recommendation is based on the following facts and conditions:

Unless otherwise stated, information used in this review was derived from the application and additional information submitted by the applicant.

An application for the purposes of this review was received on October 1, 2002.

Emission Calculations

See pages 1 and 2 of 2 TSD Appendix A of this document for detailed emissions calculations

Potential To Emit of Modification

Pursuant to 326 IAC 2-1.1-1(16), Potential to Emit is defined as “the maximum capacity of a stationary source to emit any air pollutant under its physical and operational design. Any physical or operational limitation on the capacity of a source to emit an air pollutant, including air pollution control equipment and restrictions on hours of operation or type or amount of material combusted, stored, or processed shall be treated as part of its design if the limitation is enforceable by the U.S. EPA.”

This table reflects the PTE before controls. Control equipment is not considered federally enforceable until it has been required in a federally enforceable permit.

Pollutant	Potential To Emit (tons/year)
PM	1.00
PM ₁₀	3.99
SO ₂	0.315
VOC	2.89
CO	44.2
NO _x	36.8

HAPs	Potential To Emit (tons/year)
Benzene	0.001
Dichlorobenzene	0.0006
Formaldehyde	0.039
Hexane	0.946
Toluene	0.002
Lead	0.0003
Cadmium	0.0006
Chromium	0.0007
Manganese	0.0002

HAPs	Potential To Emit (tons/year)
Nickel	0.001
TOTAL	0.991

Justification for Modification

- (a) The Part 70 Operating Permit is being modified through a Part 70 Significant Source Modification to a yet to be issued Part 70 Operating Permit because the potential to emit NO_x before controls of this modification exceeds twenty five (25) tons per year. This modification is being performed pursuant to 326 IAC 2-7-10.5(f)(4).
- (b) Since the Part 70 Operating Permit for this source has not been issued yet, the approval of this Significant Source Modification will allow the source to construct and operate.

Actual Emissions

The following table shows the actual emissions from the source. This information reflects the 2000 OAQ emission data.

Pollutant	Actual Emissions (tons/year)
PM	not reported
PM ₁₀	1,452
SO ₂	11,298
VOC	55
CO	400
NO _x	7,765
HAP	not reported

County Attainment Status

The source is located in LaPorte County.

Pollutant	Status
PM ₁₀	attainment
SO ₂	attainment
NO ₂	attainment
Ozone	attainment
CO	attainment
Lead	attainment

- (a) Volatile organic compounds (VOC) are precursors for the formation of ozone. Therefore, VOC emissions are considered when evaluating the rule applicability relating to the ozone standards. LaPorte County has been designated as attainment or unclassifiable for ozone. Therefore, VOC emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2 and 40 CFR 52.21.
- (b) LaPorte County has been classified as attainment or unclassifiable for all remaining criteria pollutants. Therefore, these emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2 and 40 CFR 52.21.

Source Status

Existing Source PSD or Emission Offset Definition (emissions after controls, based upon 8760 hours of operation per year at rated capacity and/or as otherwise limited):

Pollutant	Emissions (tons/year)
PM	greater than 250
PM ₁₀	greater than 250
SO ₂	greater than 250
VOC	greater than 100, less than 250
CO	greater than 250
NO _x	greater than 250

- (a) This existing source is a major stationary source because an attainment regulated pollutant is emitted at a rate of one hundred (100) tons per year or more, and it is one of the 28 listed source categories.
- (b) These emissions are based upon the NIPSCO Michigan City annual emission statement submitted to the IDEM in 2000.

Potential to Emit of Modification After Issuance

The table below summarizes the potential to emit, reflecting all limits, of the significant emission units after controls. The control equipment is considered federally enforceable only after issuance of this Part 70 source modification.

	Potential to Emit (tons/year)						
Process/facility	PM	PM ₁₀	SO ₂	VOC	CO	NO _x	HAPs
Proposed Modification	1.00	3.99	0.315	2.89	44.2	36.8	0.991
PSD or Offset Threshold Level	25	15	40	40	100	40	-

This modification to an existing major stationary source is not major because the emissions increase is less than the PSD significant levels. Therefore, pursuant to 326 IAC 2-2, and 40 CFR 52.21, the PSD requirements do not apply.

Part 70 Permit Determination

326 IAC 2-7 (Part 70 Permit Program)

This existing source has submitted their Part 70 (T 091-6637-00021) application on September 19, 1996. The auxiliary boiler being reviewed under this permit shall be incorporated in the submitted Part 70 application.

Federal Rule Applicability

- (a) The one (1) natural gas fired auxiliary boiler, equipped with low NO_x burners, identified as AUX1, is subject to the New Source Performance Standard, 326 IAC 12, 40 CFR Part 60.40, Subpart Db, because the boiler will be installed after the rule applicability date of June 19, 1984 and is rated at greater than one-hundred (100) million British thermal units per hour, but less than two-hundred fifty (250) million British thermal units per hour.
 - (1) Pursuant to 40 CFR 60.44b(l), no owner or operator of an affected facility that combusts natural gas shall cause to be discharged into the atmosphere from that affected facility any gases that contain nitrogen oxides (NO_x) in excess of 0.10 pounds per million British thermal units heat input, for a low heat release rate. The nitrogen oxide standards under this section apply at all times including periods of startup, shutdown, or malfunction. This limitation is based on the equation in [40 CFR 60.44b(l)].
 - (2) Compliance with the NO_x emission limitation shall be determined by the methods and procedures specified in 40 CFR 60.46b(e), which requires the installation of a continuous monitoring system. Pursuant to 40 CFR 60.47b and 60.48b (for Subpart Db), a continuous monitoring system shall be calibrated, maintained, and operated for measuring NO_x, which meets the performance specifications of 326 IAC 3-5-2, or a predictive emissions monitoring plan can be submitted to the Administrator according to 40 CFR 60.48b(g)(2) within 360 days from initial startup and the monitoring plan shall be used for determining compliance with the NO_x limit from Stack AUX1.
 - (3) The owner or operator shall keep records pursuant to 40 CFR 60.49b.
- (b) There are no National Emission Standards for Hazardous Air Pollutants (NESHAPs)(326 IAC 14 and 40 CFR Part 63) applicable to this proposed modification.
- (c) The requirements of Section 112(j) of the Clean Air Act (40 CFR Part 63.50 through 63.56) are applicable to this source because the source is a major source of hazardous air pollutant (HAP) emissions (i.e., the source has the potential to emit 10 tons per year or greater of a single HAP or 25 tons per year or greater of a combination of HAPs) and the source is constructing one or more units that belong to one or more source categories affected by the Section 112(j) Maximum Achievable Control Technology (MACT) Hammer date of May 15, 2002. This rule requires the Permittee to:
 - (1) Submit a Part 1 MACT Application within thirty (30) days of startup of the new emission unit; and

- (2) Submit a Part 2 MACT Application within twenty-four (24) months after the Permittee submitted a Part 1 MACT Application.

Note that on April 25, 2002, Earthjustice filed a lawsuit against the US EPA regarding the April 5, 2002 revisions to the rules implementing Section 112(j) of the Clean Air Act. In particular, Earthjustice is challenging the US EPA's 24-month period between the Part 1 and Part 2 MACT Application due dates. Therefore, the Part 2 MACT Application due date may be changed as a result of the suit. Based on a proposed settlement published in the August 26, 2002 *Federal Register*, it appears that US EPA intends to revise the rule so that the due date of the Part 2 MACT Application will be within twelve (12) months after the Permittee submitted the Part 1 MACT application.

- (3) Pursuant to 40 CFR 63.56(a), the Permittee shall comply with an applicable promulgated MACT standard in accordance with the schedule provided in the MACT standard if the MACT standard is promulgated prior to the Part 2 MACT Application deadline or prior to the issuance of permit with a case-by-case Section 112(j) MACT determination. The MACT requirements include the applicable General Provisions requirements of 40 CFR 63, Subpart A. Pursuant to 40 CFR 63.9(b), the Permittee shall submit an initial notification not later than 120 days after the effective date of the MACT, unless the MACT specifies otherwise. The MACT and the General Provisions of 40 CFR 63, Subpart A will become new applicable requirements, as defined by 326 IAC 2-7-1(6), that must be incorporated into the Part 70 permit. After IDEM, OAQ receives the initial notification, any of the following will occur:
 - (A) If three or more years remain on the Part 70 permit term at the time the MACT is promulgated, IDEM, OAQ will notify the source that IDEM, OAQ will reopen the permit to include the MACT requirements pursuant to 326 IAC 2-7-9; or
 - (B) If less than three years remain on the Part 70 permit term at the time the MACT is promulgated, the Permittee must include information regarding the MACT in the renewal application, including the information required in 326 IAC 2-7-4(c); or
 - (C) The Permittee may submit an application for a significant permit modification under 326 IAC 2-7-12 to incorporate the MACT requirements. The application may include information regarding which portions of the MACT are applicable to the emission units at the source and which compliance options will be followed.

State Rule Applicability - Individual Facilities

326 IAC 3-5 (Continuous Monitoring of Emissions)

Pursuant to 326 IAC 3-5, continuous emission monitoring system for the one (1) auxiliary boiler shall be calibrated, maintained and operated for measuring NO_x emission rates in pounds per hour from Stack AUX1 in accordance with performance specifications in 326 IAC 3-5-2.

326 IAC 6-2-4 (Particulate Emission Limitations for Sources of Indirect Heating)

The one (1) natural gas fired auxiliary boiler, to be constructed, rated at 120 million British thermal units per hour, must comply with the requirements of 326 IAC 6-2-4.

The total heat input capacity for the source, including the one (1) 120 million British thermal units per hour boiler, is 6,216 million British thermal units per hour.

$$Pt = 1.09/(6,216)^{0.26} = 0.112 \text{ lb/mmBtu heat input}$$

Based on page 1 of Appendix A, the potential PM emission rate is:

$$3.99 \text{ ton/yr} \times (2000 \text{ lbs/ton} / 8760 \text{ hrs/yr}) = 0.911 \text{ lb/hr}$$
$$(0.911 \text{ lb/hr} / 6,216 \text{ mmBtu/hr}) = 0.0001 \text{ lb PM per mmBtu}$$

Therefore, the one (1) auxiliary boiler identified as AUX1, will comply with this rule.

The above emission limitation is based on the following equation given in 326 IAC 6-2-4:

$$Pt = 1.09/Q^{0.26}$$

where:

Pt = Pounds of particulate matter emitted per million British thermal units (lb/mmBtu) heat input

Q = Total source maximum operating capacity rating in million British thermal units per hour (mmBtu/hr) heat input. The maximum operating capacity rating is defined as the maximum capacity at which the facility is operated or the nameplate capacity, whichever is specified in the facility's permit application, except when some lower capacity is contained in the facility's operation permit; in which case, the capacity specified in the operation permit shall be used.

326 IAC 10-4 (NO_x Budget Trading Program)

The one (1) auxiliary boiler is not subject to the requirements of 326 IAC 10-4 (NO_x Budget Trading Program) because this boiler is not used to produce electricity.

Compliance Requirements

Permits issued under 326 IAC 2-7 are required to ensure that sources can demonstrate compliance with applicable state and federal rules on a more or less continuous basis. All state and federal rules contain compliance provisions, however, these provisions do not always fulfill the requirement for a more or less continuous demonstration. When this occurs IDEM, OAQ, in conjunction with the source, must develop specific conditions to satisfy 326 IAC 2-7-5. As a result, compliance requirements are divided into two sections: Compliance Determination Requirements and Compliance Monitoring Requirements.

Compliance Determination Requirements in Section D of the permit are those conditions that are found more or less directly within state and federal rules and the violation of which serves as grounds for enforcement action. If these conditions are not sufficient to demonstrate continuous compliance, they will be supplemented with Compliance Monitoring Requirements, also Section D of the permit. Unlike Compliance Determination Requirements, failure to meet Compliance Monitoring conditions would serve as a trigger for corrective actions and not grounds for enforcement action. However, a violation in relation to a compliance monitoring condition will arise through a source's failure to take the appropriate corrective actions within a specific time period.

There are no specific Compliance Monitoring requirements for this source.

Conclusion

The construction and operation of this auxiliary boiler shall be subject to the conditions of the attached proposed Significant Source Modification No. 091-16184-00021.

**Appendix A: Emission Calculations
Natural Gas Combustion Only
MMBTU/HR >100**

Page 1 of 2 TSD App A

**Company Name: NIPSCO Michigan City Generating Station
Address City IN Zip: 100 North Wabash Street, Michigan City, IN 46360
SSM: 091-16184
Pit ID: 091-00021
Reviewer: Craig J. Friederich
Date: October 1, 2002**

Heat Input Capacity
MMBtu/hr

Potential Throughput
MMCF/yr

120.0000

1051.2

Emission Factor in lb/MMCF	Pollutant					
	PM*	PM10*	SO2	NOx	VOC	CO
	1.9	7.6	0.6	70.0 **see below	5.5	84.0
Potential Emission in tons/yr	1.00	3.99	0.315	36.8	2.89	44.2

*PM emission factor is filterable PM only. PM10 emission factor is condensable and filterable PM10 combined.

**Emission Factors for NOx are from Vendor Certification for the low-NOx burners

Methodology

All emission factors are based on normal firing.

MMBtu = 1,000,000 Btu

MMCF = 1,000,000 Cubic Feet of Gas

Potential Throughput (MMCF) = Heat Input Capacity (MMBtu/hr) x 8,760 hrs/yr x 1 MMCF/1,000 MMBtu

Emission Factors from AP 42, Chapter 1.4, Tables 1.4-1, 1.4-2, and 1.4-3, SCC #1-01-006-01, 1-01-006-04 (AP-42 Supplement D 3/98)

Emission (tons/yr) = Throughput (MMCF/yr) x Emission Factor (lb/MMCF)/2,000 lb/ton

Note: Check the applicable rules and test methods for PM and PM10 when using the above emission factors to confirm that the correct factor is used (i.e., condensable included/not included).

See page 2 for HAPs emissions calculations.

Appendix A: Emission Calculations

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Natural Gas Combustion Only**MMBTU/HR >100****Utility Boiler****HAPs Emissions****Company Name: NIPSCO Michigan City Generating Station****Address City IN Zip: 100 North Wabash Street, Michigan City, IN 46360****SSM: 091-16184****Plt ID: 091-00021****Reviewer: Craig J. Friederich****Date: October 1, 2002****HAPs - Organics**

Emission Factor in lb/MMcf	Benzene 2.1E-03	Dichlorobenzene 1.2E-03	Formaldehyde 7.5E-02	Hexane 1.8E+00	Toluene 3.4E-03
Potential Emission in tons/yr	1.10E-03	6.31E-04	3.94E-02	9.46E-01	1.79E-03

HAPs - Metals

Emission Factor in lb/MMcf	Lead 5.0E-04	Cadmium 1.1E-03	Chromium 1.4E-03	Manganese 3.8E-04	Nickel 2.1E-03
Potential Emission in tons/yr	2.63E-04	5.78E-04	7.36E-04	2.00E-04	1.10E-03

Methodology is the same as page 1.

The five highest organic and metal HAPs emission factors are provided above.

Additional HAPs emission factors are available in AP-42, Chapter 1.4.